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Washington 25, D. C.

To: Regional Foresters and Directors

File No. 1650

From: Edward P. Cliff, Chief, By

Date: April 27, 1962

Subject: Contacts and Others

Attached is a copy of a talk presented by Neal M. Rahm at the National Forest Fire Prevention Workshop in Gulfport, Mississippi, on April 17.

We think you will be interested in Mr. Rahm's approach to fire prevention from a multiple use viewpoint; also, the importance of implementing the Organization Study, Uniform Work Planning, and the National Forest Program in terms of on-the-ground application of multiple use decisions.

Enclosure

Distribution: Rangers

/s/ Clare Hendee

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MULTIPLE USE PLANNING AND COORDINATION

The topic assigned to Bob Cron and me is MULTIPLE USE PLANNING AND COORDINATION.

It is quite obvious from the presentations yesterday and today there is no lack of recognition of opportunities to prevent fires and to keep them small in the coordinated management of other resources and land uses. The fact that we recognize all these opportunities is no assurance we will grasp them. And coordination does not just happen--it must be made to happen.

To some people multiple use planning is black magic--once a multiple use plan is completed, everything falls into place and we live thereafter in a paradise of ease where the harps are always in tune and the sheets freshly laundered. Nothing is farther from the truth. If it were the truth, there would be no need for the great emphasis we are placing on multiple use today nor for the multiple use-sustained yield legislation enacted in June 1960. Multiple use management is not a function. It is a process of coordinated, cooperative action. The fact remains we haven't always done so well in the past, and before we can do better we must first recognize that a problem exists. Next--we must identify the cause or causes, then select a course of action to correct the cause and solve the problem.

I will start by emphasizing the need for more of our people to recapture a total land ethic as a sound springboard for multiple use management. And for our purposes, the term "land" includes soil, water and vegetation. There is no point for me to embark on the mechanics of multiple use unless this ethic--this philosophy of stewardship for the whole benefit of the land and resources is recognized. There are probably many reasons why an ethic eludes us, among them being emphasis on functional specialization. Specialization is inevitable in the industrial age and leads to efficient skilled performance in particular fields. But we can't afford illusions; uncoordinated specializations can lead to chaos. We must hold on to the total objective of our work so as to relate ourselves to all the parts.

A land use ethic rests on a single premise: That we as individuals are members of an organization made up of interdependent parts. Our instincts and inclinations prompt us to compete for a place in this organization. But an ethic prompts us also to cooperate for the good of the total effort to maintain and improve the health of the land.

Address by Neal M. Rahm, April 17, 1962, at the National Forest Fire Prevention Workshop, Gulfport, Mississippi.

Because of our preoccupation with competition we have a tendency to overlook associated values. As an example, we often say that preventing fires from starting is basic to all resource management. Actually what we mean is the prevention of large devastating fires that destroy resources. Danger rests in our zeal to reduce numbers as an objective itself. By so doing we may lose sight of opportunities in the management of other resources to keep fires from becoming large. As an example, it wouldn't make much difference along a particular section of railroad right-of-way whether we had one or ten fire starts if the vegetation beyond the right-of-way was lush grass that wouldn't carry fire. Not having this assurance, it is simple logic that the fewer fires we have, the less the chance there is of one becoming large. But without this assurance, even one fire on the right day and in the right place can be too many.

Frequently we observe a sort of tug-of-war ritual between fire control and timber management specialists over the amount of hazard reduction money to be allowed in appraisals for slash disposal. Some timber specialists aren't particularly interested in how much or how little hazard reduction is done as long as a minimum amount of financing comes out of timber receipts. Fire specialists are interested in getting as much fuel disposal as possible because it simplifies the protection job. I doubt that either individual has a real land ethic which considers what is best for the land. If they did the issues wouldn't be compromised on the basis of some standard acreage percentage applicable over vast areas. The real problem is one of achieving some sort of balance between the two viewpoints founded on what is best for the land.

From the aspect of a land ethic, we should ask these questions:

1. What detrimental effect or benefit to the total health of the land will result from this timber sale?

2. What can be done from the standpoint of silviculture or logging methods to avoid undesirable effects on or improvement to associated resources?

3. What is the maximum burned area we can stand and still stay in business?

4. What must be done in terms of fire protection (hazard reduction, suppression and prevention) to give fire forces a reasonable chance of meeting these goals?

I wonder how many range revegetation projects have been laid out with full consideration of the needs for fire control; i.e., separating risk and high value timber areas? I know of some, but not many.

In Colorado we have a problem regenerating spruce in clearcut areas. Research and Administration have been working on this problem for years. Engelmann spruce regenerates itself under natural conditions and there is usually a good supply of advanced growth in the mature stands. When spruce is burned, the area usually comes back to lodgepole or aspen which is eventually replaced by spruce. Currently the clearcuts are roughly logged and the slash burned, thus destroying the advanced growth and seed supply. We then attempt to restore spruce artificially in exposed dry sites contrary to the ecology of the species.

Considering a land ethic--what is best for the land--we might ask ourselves these questions:

1. Would it be preferable to log more carefully and protect the established advanced growth?

2. Considering fire history and absence of many high danger periods, is it really necessary to burn the slash?

3. Is the presence of slash more beneficial for soil protection and spruce establishment than its disposal for fire protection? Are we really disposing of the slash for fire protection or for appearance?

4. Shade is essential to regenerating spruce. Is it possible to adopt a silvicultural system that will provide shade?

5. Why spruce? Wouldn't another species be equally acceptable in terms of the rotation period?

6. To what extent will spruce beetles dictate management practices?

We have all observed spur logging roads "put to bed" so thoroughly that vehicular travel over them was impossible. In some instances the areas contain an overpopulation of deer doing great damage to timber reproduction. The reason given for closing access is to prevent hunter fires or to eliminate the need for road maintenance.

The questions to ask in this instance are quite obvious. Aren't there other ways to prevent fires and maintain the road so as to permit hunter access and management of the deer herd?

In other cases we see areas set aside and timber cutting excluded without any positive effort to develop logging methods whereby we could harvest timber without detrimental effects.

In our single purpose interest to meet allowable cut goals we sometimes log areas on steep slopes and erosive soils that do not regenerate and also erode at a startling rate. Some of our timber management practices appear to be geared to economics rather than a total land ethic.

You may say, and properly so, that I should consider the facts of life and certain practicalities. I have, but I am also aware we are finding less public tolerance today for land use practices which adversely affect production and values of associated resources. I also know we can do what must be done, but the cost of doing business will also increase with rising standards. There is a price tag attached to intensive multiple use management and we must be prepared to face it. I cannot completely visualize the management standards of tomorrow. They will take shape in the environment prevailing at any given time or place. I only know that all signs point toward greater attention to ethical considerations of land productivity, protection, and appearance.

Compounding the problem of the manager in achieving balance between economics and ecology of the land, are pressures by special interest groups. These pressures, unless objectively considered, could lead to underdevelopment of some resources and "too little, too late" performance of urgent tasks which must be done. Or, they could lead to an all-out push in one direction which would seriously weaken our effectiveness in other functions. We all remember the deplorable conditions of recreation facilities prior to Operation Outdoors.

We have identified some trouble areas and a few causes (there are probably many more). What should be our course of action?

In the last thirty years, man-caused fires have dropped from about twenty per million acres to fifteen; burned acreage from 1,700 to 1,000 acres per million acres. In light of the tremendous increase in risk, progress has been better than the record shows. However, since these are averages, fifteen man-caused fires and 1,000 acres are most certainly not tolerable considering time and place. I have an uneasy feeling that periodically we will continue to lose our shirt, and at great cost, unless we expand our horizons beyond prevention and suppression alone. We need some control of the decision on how large a fire is apt to become after one starts and escapes the initial attack.

Because of the need for this assurance, I believe the biggest breakthrough in fire protection in the next decade will fall in the sphere of improved land management. Practices will be adopted which will not only improve a particular resource, but will be geared to reducing burning intensity and rates of spread.

How will this be accomplished? It is obvious that any method we use will require a high degree of coordination and cooperation between fire control and all other activities. Multiple use planning itself will not solve all the problems of the harassed District Rangers in this mad world of ours, but it is one device that will help.

As I previously stated, multiple use is a process of coordination, and there are many elements involved. Implementing the Organization Study is one. A very important feature of multiple use planning and management is single authority control. This problem is not new. Even the ancient Greeks had trouble with it as indicated by Aristotle's question:

> Should one person keep order in the market place and another in some other place, or should the same person be responsible everywhere? Again, should the offices be divided according to the subjects with which we deal, or according to the persons with whom they deal?

Lord Macaulay made a more pungent observation:

> Many an army has prospered under a bad commander, but no army has ever prospered under a debating society.

The unit manager at each level of administration must possess a land ethic which will be reflected in coordinated planning and decisions.

Uniform work planning and budgeting is another excellent control for combined operations and development. If coordinated programs are prepared, area by area, another precept of multiple use is satisfied--to develop more and different kinds of uses in harmonious combinations to meet expanding public needs. The trend in budgeting is to de-emphasize functional financial control and emphasize program accomplishment. It is quite possible that in the future, Ranger Districts and Forests will receive financial allotments in a lump sum with few functional strings or controls. Allotments will be based on project estimates for a balanced program for specific areas. Unit managers will be accountable for completing a program to established standards and will have full latitude to shift money between projects to assure balanced accomplishment. The President's 10-Year Program and Uniform Work Planning are pointed in this direction.

The advantages of this approach are almost too simple to grasp. A unit manager might decide, with the assistance of specialists, that a 100 percent hazard reduction project is necessary for a particular area. He would not be restricted by any in-Service imposed limitation on use of funds. He would simply allocate sufficient money to the project to do the job. If a newly reforested area required fence protection there would be no debate as to whether range or timber management funds would finance the project.

Now for multiple use planning and application. I don't have the courage to go into all the refinements of planning and execution with this informed group. I will simply highlight the most pertinent features.

The most singular change in multiple use planning is the shift from a functional to an area concept. Coordinated policies, plans and decisions are specifically related to particular areas of land. This change has been difficult to make in the face of our traditional methods of organizing, planning, and controlling. To really make a change, it is necessary to create an image of change. The retention of functional procedures hasn't helped matters.

At the National level, laws are translated in the Manual and Handbooks, and authorities and responsibilities delegated to Regional Foresters. Regional Guides spell out coordinating policies for particular areas of land. Ranger District Multiple Use Plans contain coordinating decisions within the framework of Regional policies. These decisions also are related to particular areas. Coordinating decisions then emerge as specifications in project and functional plans, contracts and special use permits that occur in the areas for which the multiple use decisions are applicable. In final analysis, decisions and objectives in District multiple use plans terminate in courses of action or jobs. These tasks are reflected in annual work plans, monthly job and trip plans, and special assignments to District personnel.

A District Forest Ranger must recognize his multiple use job requires:

1. Deliberate and carefully planned integration of various uses so as to interfere with each other as little as possible and to supplement each other as much as possible.

2. The skillful adjustment of land resources and uses into a pattern of harmonious action to achieve overall objectives for the area being managed.

3. The coordination of existing and potential uses and activities with a resultant benefit to people that is greater than the sum of the individual uses if they were not coordinated.

Thus the fundamental key to understanding multiple use management is the knowledge that (1) it requires conscious planning and management;(2) it is directed primarily at satisfying the needs and wants of people rather than full development of a particular resource; and (3) its end objective is an increased yield of products and services from a given area while maintaining resource productivity and the health or the good of the land.

In summary, I wish to repeat:

1. Multiple use is not a function. It is a process of coordination.

2. A land ethic must be recognized and fully accepted. It is the foundation upon which multiple use planning and management is built.

3. The most promising opportunity for a "break-through" in fire protection rests in land management practices which reduce burning intensities and rates of spread in total areas or in designed barriers. This will require a high degree of coordination in the management of all resources and activities.

4. There are many devices for attaining good coordination. The most promising are (a) implementing the Organization Study, (b) uniform work planning and budgeting, (c) stepping the 10-Year Program down to Districts and areas, and (d) application of multiple use plans.

In closing, I want to point out that man has had a major role in changing the face of the earth. Over and above the slow changes from natural causes, such as climate, our land has suffered immeasurable damage by the uncalculating actions of both savages and civilized men. The task now is to restore and improve, through total management, the resources we have left.

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